

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference KFE0101WOJ	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2004/014447	International filing date (day/month/year) 24.09.2004	Priority date (day/month/year) 30.09.2003	
International Patent Classification (IPC) or national classification and IPC D01F8/10 , A01K91/00, D01F6/12			
Applicant KUREHA CORPORATION			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>2</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/014447

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following which is the language of a translation furnished for the purposes of:

- international search (Rule 12.3 and 23.1(b))
- publication of the international application (Rule 12.4)
- international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished
 the description:

pages 1-13 as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

the claims:

nos. 1-5, 7-11 as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19

nos.* 6 received by this Authority on 09.09.2005

nos.* _____ received by this Authority on _____

the drawings:

sheets _____ as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superceded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/014447

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims <u>1-11</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims <u>1-11</u>	YES
	Claims _____	NO
Industrial applicability (IA)	Claims <u>1-11</u>	YES
	Claims _____	NO

2. Citations and explanations (Rule 70.7)

Document 1: JP 59-144614 A

Document 2: JP 10-292226 A

Document 3: JP 9-119020 A

Document 4: JP 60-231815 A

Document 5: WO 01/53574 A1

Claims 1 to 5

Document 1 sets forth a monofilament comprising a vinylidene fluoride resin, with a heightened inherent viscosity and heightened knot strength, and documents 2 to 4 also set forth a monofilament comprising a similar vinylidene fluoride resin, but there is no indication that specific twisting index conditions are satisfied together with a high knot strength. Document 5 indicates that improving knot strength and curling set is an issue which must be addressed, but solutions which can be implemented by increasing inherent viscosity are not suggested.

Therefore the inventions set forth in claims 1 to 5 are novel and involve an inventive step.

Claims 6 to 9

Documents 1 to 5 neither disclose nor suggest that a

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

drawn vinylidene fluoride resin monofilament with a high inherent viscosity is subjected to high-temperature relaxation heat treatment for a specified extremely short period of time.

Therefore the invention set forth in claim 6 is novel and involves an inventive step. In addition, the invention set forth in claims 7 to 9 technically delimits the invention set forth in claim 6, therefore this invention is similarly novel and involves an inventive step.

The fact that claim 9 refers back to claim 9 is clearly a typographical error.

Claims 10 and 11

The invention set forth in claims 10 and 11 is novel and involves an inventive step, in the same way as the invention set forth in claims 1 to 5.